

### **Amendment to Claims**

This listing of Claims will replace all prior versions and listings of claims in this Application.

#### **Listing of Claims**

Claim 1. (Cancelled)

Claim 2. (NEW) A method utilizing ECG data and a computer system for detecting myocardial infarction in a patient's heart comprising

receiving from that patient ECG data which includes ST data,

examining such included ST data to detect whether it indicates the presence of an ST deviation,

as a result of said examining, and if such an ST deviation is detected, analyzing the ST deviation to determine whether it is a benign or a non-benign deviation,

if the ST deviation is determined to be non-benign, implementing a selected pathological thresholding step,

following said implementing, normalizing the detected and determined non-benign ST deviation data,

after performing said normalizing, applying selected pattern analysis to the normalized, non-benign ST deviation data, and

after said applying, generating a score indicating the yes/no presence of a myocardial infarction.